**PATENT** 

10/538871 JC17 Rec'd PCT/PTO 14 JUN 2005

## AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. (Currently Amended) Intumescent body made of a non-intumescent polymer material providing the form of the body and a coating mass applied to the polymer material, wherein characterized thereby that together with the coating mass, the polymer material results in an intumescent system in which the polymer material forms a carbon-donor component.
- 2. (Original) Intumescent body as defined in claim 1, wherein the polymer material has a carbon content of  $\geq 20$  weight %.
- 3. (Currently Amended) Intumescent body as defined in <u>claim 1 one of the preceding</u> elaims, wherein the polymer material provides a share of at least 20 weight % of the carbon in the intumescent system.
- 4. (Currently Amended) Intumescent body as defined in claim 1 one of the preceding elaims, wherein a difference  $\Delta T$  between a melting temperature  $T_S$  and a crystallization temperature  $T_C$  of the polymer material is  $\geq 40$  K.

Docket No.: GAS-009 PATENT

5. (Currently Amended) Intumescent body as defined in claim 1 one of the preceding claims, wherein a difference ΔT is in the range of 40 to 80 K, preferably in the range of 45 to 75 K, particularly preferably in the range of 55 to 70 K.

- 6. (Currently Amended) Intumescent body as defined in claim 1 one of the preceding elaims, wherein the crystallization temperature  $T_C$  is  $\leq 200$  °C, preferably  $\leq 190$  °C.
- 7. (Currently Amended) Intumescent body as defined in claim 1 one of the preceding claims, wherein the polymer material has a melting temperature Ts in the range of 50 °C to 400 °C or a decomposition temperature in the range of 150 °C to 500 °C.
- 8. (Currently Amended) Intumescent body as defined in <u>claim 1 one of the preceding</u> elaims, wherein the intumescent system is a halogen-free and/or heavy metal-free system.
- 9. (Currently Amended) Intumescent body as defined in claim 1 one of the preceding elaims, wherein the polymer material is selected from the following group: polyester, polyamide, polyacrylat, polyure-thane, polyacrylnitril, aramids and derivatives of the afore-mentioned polymers.
- 10. (Currently Amended) Intumescent body as defined in <u>claim 1 one of the preceding</u>, elaims, wherein the coating mass contains a flame retarding agent.

11. (Currently Amended) Intumescent body as defined in <u>claim 1 one of the preceding</u> elaims, wherein the coating mass has the following composition:

25 to 95 weight % of an aqueous dispersion containing poly-urethane or polyacrylat,

0.5 to 10 weight % of an isocyanate or a melamine-formaldehyde and 3 to 15 weight % of the flame retarding agent.

- 12. (Currently Amended) Intumescent body as defined in <u>claim 1 one of the preceding</u> elaims, wherein the flame retarding agent is an acid donor.
- 13. (Currently Amended) Intumescent body as defined in <u>claim 1 one of the preceding</u> elaims, wherein the acid donor is ammonium polyphosphate.
- 14. (Currently Amended) Intumescent body as defined in <u>claim 1 one of the preceding</u> claims, wherein, in addition, 0.1 to 1.0 weight % of an agent for deaeration are included.
- 15. (Currently Amended) Intumescent body as defined in claim 1 one of the preceding claims, wherein, in addition, 0.1 to 1.5 weight % of an insecticide and/or a bactericidin are included.
- 16. (Currently Amended) Intumescent body as defined in <u>claim 1 one of the preceding</u> elaims, wherein the polymer material is present in the form of fibers or woven cloth, knitted fabric made thereof.

- 17. (Original) Use of a non-intumescent polymer material providing the form of a body as carbon-donor component of an intumescent system.
- 18. (Original) Use as defined in claim 17, wherein further components of the intumescent system are contained in a coating mass applied to the polymer material.
- 19. (Currently Amended) Use as defined in <u>claim 17 one of the claims 17 or 18</u>, wherein the polymer material has a carbon content of ≥ 20 weight %.
- 20. (Currently Amended) Use as defined in <u>claim 17 one of the claims 17 to 19</u>, wherein the polymer material provides a share of at least 20 weight % of the carbon in the intumescent system.
- 21. (Currently Amended) Use as defined in claim 17 one of the claims 17 to 20, wherein a difference  $\Delta T$  between a melting temperature  $T_S$  and a crystallization temperature  $T_C$  is greater than 40 K.
- 22. (Currently Amended) Use as defined in claim 17 one of the claims 17 to 21, wherein the difference ΔT is in the range of 40 to 80 K, preferably in the range of 45 to 75 K, particularly preferably in the range of 55 to 70 K.

6

- 23. (Currently Amended) Use as defined in claim 17 one of the claims 17 to 22, wherein the crystallization temperature  $T_C$  is  $\leq 200$  °C, preferably  $\leq 190$  °C.
- 24. (Currently Amended) Use as defined in <u>claim 17 one of the claims 17 to 23</u>, wherein the intumescent system is a halogen-free and/or heavy metal-free system.
- 25. (Currently Amended) Use as defined in <u>claim 17 one of the claims 17 to 24</u>, wherein the polymer material is selected from the following group: polyester, polyamide, polyacrylat, polyurethane, polyacrylni-tril, aramids and derivatives of the aforementioned polymers.
- 26. (Currently Amended) Use as defined in <u>claim 17 one of the claims 17 to 25</u>, wherein the intumescent system is a system causing a chemical or physical intumescence.
- 27. (Currently Amended) Use as defined in <u>claim 17 one of the claims 17 to 26</u>, wherein the coating mass contains a flame retarding agent.
- 28. (Currently Amended) Use as defined in <u>claim 17 one of the claims 17 to 27</u>, wherein the polymer material has a melting temperature T<sub>S</sub> in the range of 50 °C to 400 °C or a decomposition temperature in the range of 150 °C to 500 °C.
- 29. (Currently Amended) Use as defined in <u>claim 17 one of the claims 17 to 28</u>, wherein the coating mass has the following composition:

25 to 95 weight % of an aqueous dispersion containing poly-urethane or polyacrylat,

- 0.5 to 10 weight % of an isocyanate or a melamine-formaldehyde and 3 to 15 weight % of the flame retarding agent.
- 30. (Currently Amended) Use as defined in <u>claim 17 one of the claims 17 to 29</u>, wherein the flame retarding agent is an acid donor.
- 31. (Currently Amended) Use as defined in <u>claim 17 one of the claims 17 to 30</u>, wherein the acid donor is ammonium polyphosphate.
- 32. (Currently Amended) Use as defined in claim 17 one of the claims 17 to 31, wherein, in addition, 0.1 to 1.0 weight % of an agent for deaeration are included.
- 33. (Currently Amended) Use as defined in claim 17 one of the claims 17 to 32, wherein, in addition, 0.1 to 1.5 weight % of an insecticide and/or a bactericidin are included.
- 34. (Currently Amended) Use as defined in <u>claim 17 one of the claims 17 to 33</u>, wherein the polymer material is present in the form of fibers or woven cloth, knitted fabric made thereof.

8